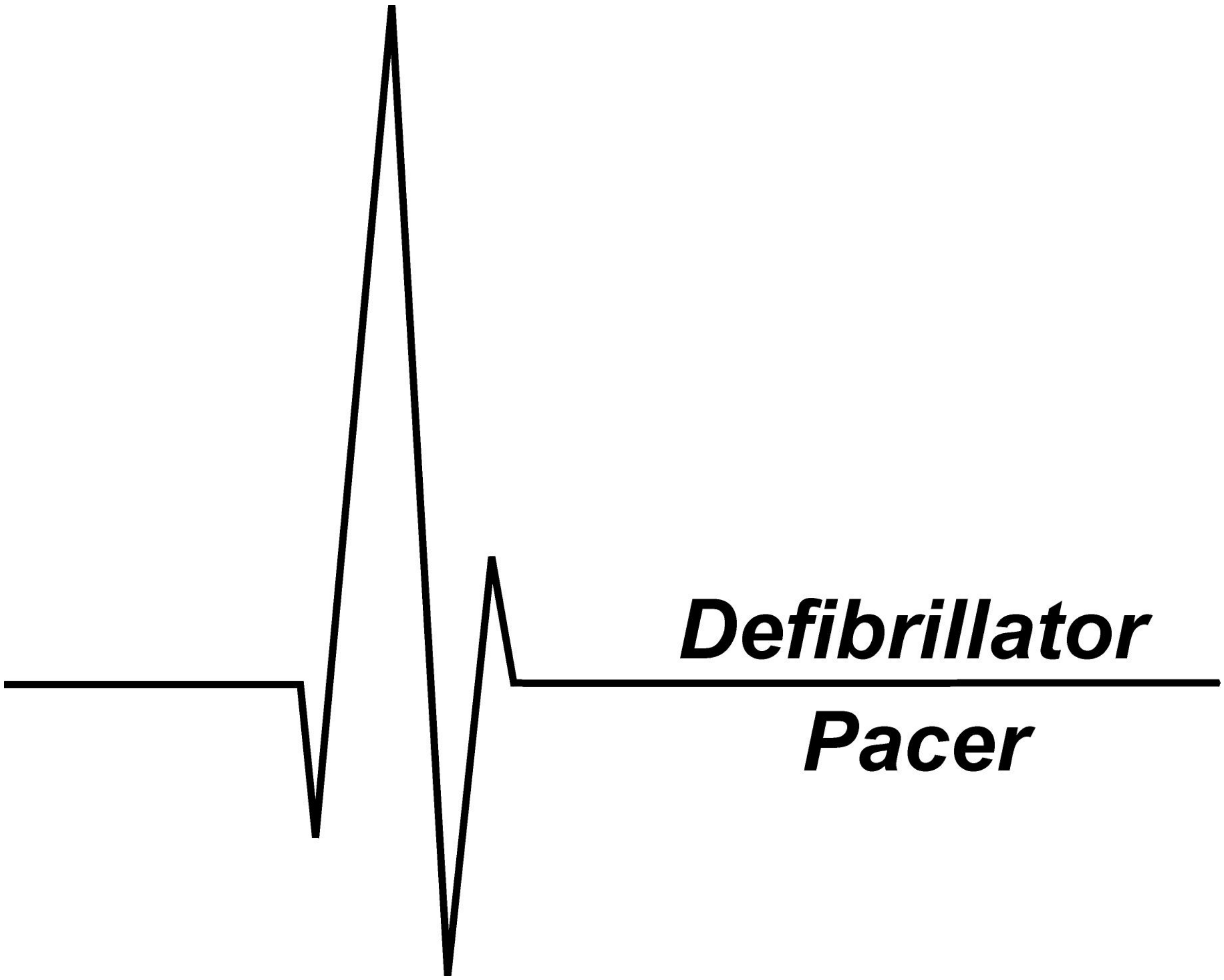
ESCORT Defibrillator / Pacer
Service Manual

Model
20201
20202


Defibrillator
Pacer

MDE MEDICAL DATA ELECTRONICS
a subsidiary of VIASYS Healthcare

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Part Number: E9040-05 Rev E
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Federal law restricts this device to sale by or on the order of a physician

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Medical Data Electronics —12723 Wentworth Street —Arleta, California 91331-4330
(818) 768-6411 —FAX (818) 768-0759

Warranty

This defibrillator/pacer is warranted against defects in materials and workmanship for a period of twelve (12) months from the date of shipment to the original purchaser. Batteries, cables, cuffs, sensors, and electrodes are warranted ninety (90) days from date of shipment. Warranty is valid only to the original buyer. Defective equipment should be returned freight prepaid to Medical Data Electronics. Equipment returned with defective parts and assemblies will be either repaired or replaced. This warranty is not applicable if repair has been attempted, if the instrument has been damaged due to operation outside the environmental and power specifications for the product, or due to improper handling or use.

If any fault develops, notify MDE Technical Support giving full details of the difficulty, and include the model and serial number of the device. Upon receipt of the shipping instructions, forward the device prepaid and repairs will be made at the factory.

The foregoing warranty is in lieu of all other warranties expressed or implied, including but not limited to any implied warranty or merchantability, fitness or adequacy for any particular purpose or use. Medical Data Electronics shall not be liable for any incidental or consequential damages.

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Technical Service

If you experience any problems with this product or would like more information about related equipment, please call one of the telephone numbers listed below. You can also send an email to the email address below.

Technical Service:	(818) 768-6411
MDE FAX Line:	(818) 768-2899
Email	technicalsupport@emailmde.com

Written requests for information should be addressed to:

Medical Data Electronics
12723 Wentworth Street
Arleta, CA 91331-4330

Trademarks and Acknowledgments

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ESCORT Prism™ is a trademark of MDE.

Safety Considerations

Read the following sections before using or servicing the defibrillator/pacer. These cautions and warnings are presented to increase both user and patient safety, and to prevent damage to the defibrillator/pacer.

WARNING: Shock hazard. The user should not perform any servicing unless qualified to do so.

WARNING: Keep hands and paddles free of gel. Paddles must be cleaned after each use to avoid the danger of operator shock.

WARNING: User contact with patient, bed, or electrodes presents a potential shock hazard during defibrillation. Operator and other members of the resuscitation team should stand clear of the patient and bed during defibrillation.

WARNING: When operating the defibrillator from an AC power source, the wall receptacle must be a three-wire, grounded, hospital grade outlet. Use only defibrillator's original hospital grade AC power plug and cord or an equivalent hospital grade plug and cord. If in doubt about the integrity of the grounding of the main supply connection, the unit must be operated by battery power.

WARNING: High Voltage/High Energy Potentials. This equipment stores high voltage potentials at high energy levels, which are potentially lethal. Before servicing this instrument or removing any covers, insure the storage capacitor has been completely discharged, remove AC power mains, remove the battery, and remove paddle assembly.

WARNING: Improper servicing or maintenance may result in improper calibration and instrument failure.

WARNING: Improper calibration of this instrument may result in hazardous operation or failure of this device.

WARNING: Improper calibration of the defibrillator charging circuit may result in an explosion of the storage capacitor, possibly resulting in serious injury or death. Refer all calibration of this instrument to qualified personnel only.

WARNING: Do not discharge paddles into the open air or while shorted together.

CAUTION: Only qualified personnel should attempt to perform repairs or removal of any parts within this system. Opening the unit or removing covers could violate the warranty.

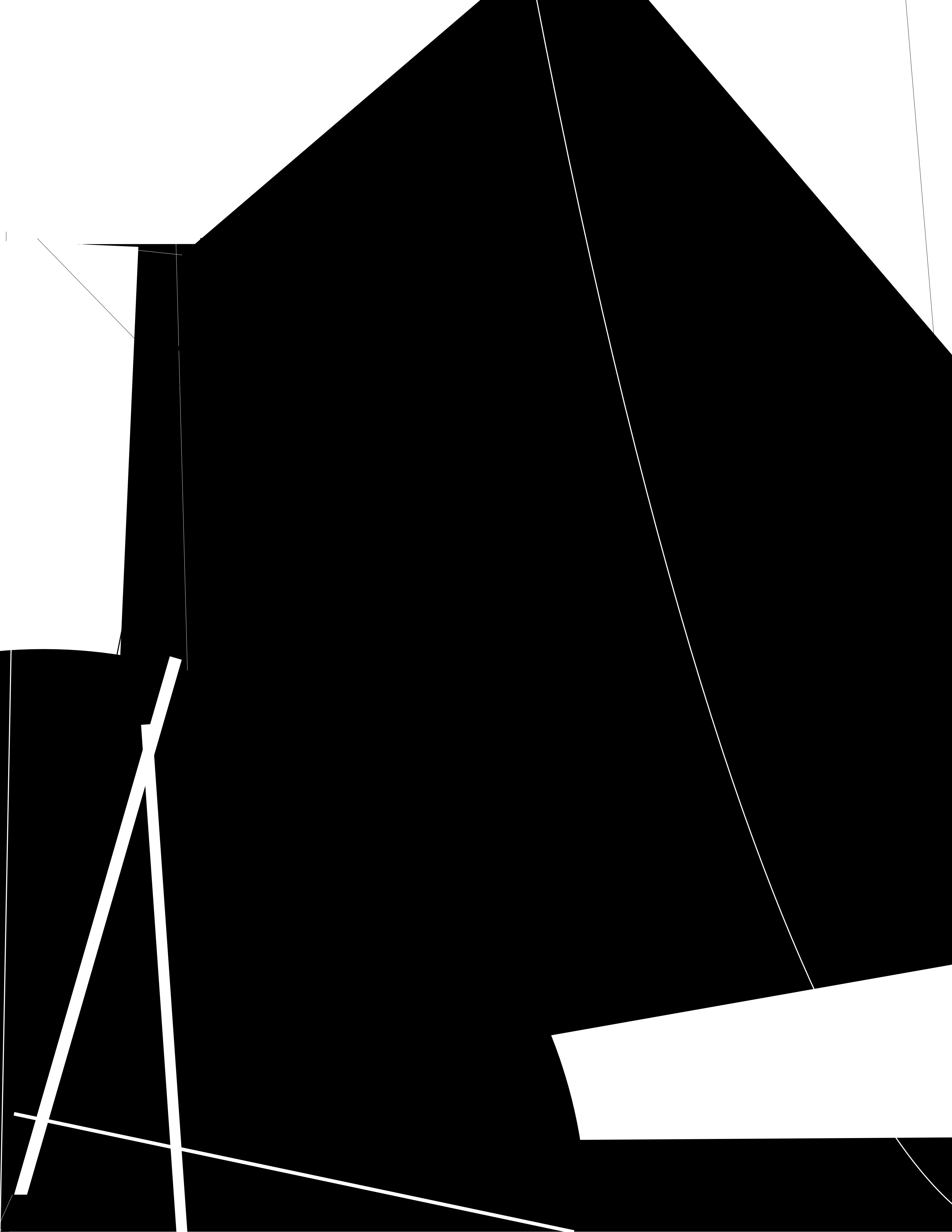
CAUTION: Make sure to use an ECG cable with an inline resistor so the monitor is protected from high voltage during defibrillation.

CAUTION: Do not operate defibrillator in the presence of high-energy electrical fields. External electrical noise may corrupt the ECG tracing.

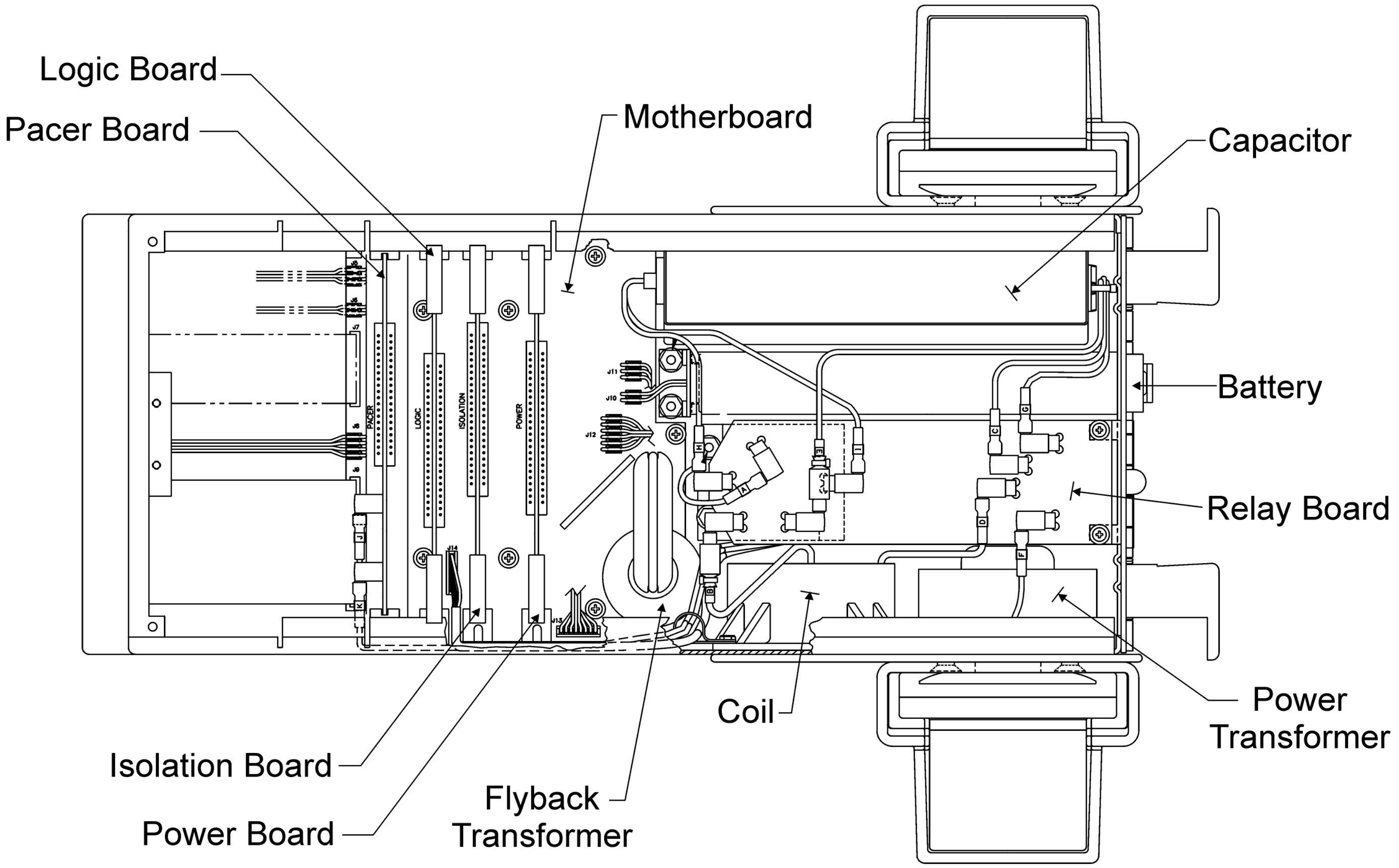
CAUTION: Do not immerse paddles, cables, or electrical connector in liquids during cleaning and disinfecting. Do not allow liquid or electrode gel to enter switches, cable entrance, or connector.

CAUTION: This system contains static sensitive circuitry. Always use an ESD (Electro-Static Discharge) wrist or ankle strap that is properly grounded. Always perform service in an ESD safe environment.

CAUTION: When returning defibrillator/pacer to MDE for repair, ship with the battery removed and the paddle assembly disconnected.



Bottom View with Cover Removed


Logic Board
Pacer Board
Motherboard
Capacitor
Battery
Relay Board
Power Transformer
Coil
Flyback Transformer
Isolation Board
Power Board
PACER
LOGIC
ISOLATION
POWER
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J8
J9
J10
J11
J12
J13
J14
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Chapter 2

Controls and Indicators

Defibrillator/Pacer Front Overview

1. Defibrillator/Pacer Carrying Handle
2. APEX Defibrillator Paddle
3. Energy CHARGE (transparent/lighted) and DISCHARGE (red) Buttons on APEX Paddle
4. Energy DISCHARGE Button on Sternum Paddle
5.